Displaying item 1 of 7

DISR Number 8229 Org Number NGA00204

Standard Identifier OpenGIS SOS 1.0

Standard Title OpenGIS Sensor Observation Service Implementation Specification, Version

1.0, 26 October 2007

CR Proposal Add New Emerging Standard

CR Rationale Sensor Observation Service (SOS) Standard supports requirements for a

web service interface for requesting, filtering, and retrieving observations and

sensor system information.

Input Date2007-12-04Last Updated2008-02-22AuthorJoan BarryAuthor Phone703.814.4564

Author EmailJoan.C.Barry@nga.milOrg MemberMark.L.Demulder@nga.mil

ITSC Action Not Set

Reviewing TWG Geospatial Intelligence TWG (GWG)

TWG Action Not Set
Reviewer Action Send to TWG

Org Action Accept Author's Original Input

Reviewer Action: Send to TWG - 2008-02-22 1509 - Kenton Waddell

Org Member Action: Accept Author's Original Input - 2007-12-04 1639 - Cliff Daniels

DISR Number 8229 Org Number NGA00204

CR Proposal Add New Emerging Standard

Standard Identifier OpenGIS SOS 1.0

Standard Title OpenGIS Sensor Observation Service Implementation Specification, Version

1.0, 26 October 2007

Net-Centricity Sensor Observation Service (SOS) Standard supports requirements for a

web service interface for requesting, filtering, and retrieving observations and

sensor system information.

Technical Maturity The OpenGeospatial Consortium began development of the Sensor Observa-

tion Service Implementation Specification in 2005. Sensor Observation Ser-

vice Version 1.0 was published in 2007.

Public Availability The specification is freely available from the Open Geospatial Consortium at

http://opengeospatial.org.

Implementability A list of registered implementations can be accessed at ht-

tp://www.opengeospatial.org.

Authority Open Geospatial Consortium

Applicability This standard should be used for the development of any system that re-

quires web service interface for requesting, filtering, and retrieving observa-

tions and sensor system information.

Abstract Sensor Observation Service (SOS) Standard provides web service interface

for requesting, filtering, and retrieving observations and sensor system information. This is the intermediary between a client and an observation repository or near real-time sensor channel. A Sensor Observation Service provides an API for managing deployed sensors and retrieving sensor data and specifically observation data. Whether from in-situ sensors (e.g., water monitoring) or dynamic sensors (e.g., satellite imaging), measurements made from sensor systems contribute most of the geospatial data by volume used

in geospatial systems today. http://opengeospatial.org

OpenGIS

URL to Access or Acquire

Standard Organization

Sunset Event

Sunset Date Supersedes Standard Type

Standard Type Non-Military
Classification Unclassified

Profiling QuestionDoes your system require a web service interface for requesting, filtering, and

retrieving observations and sensor system information? GEOINT: Geospatial

Service Area

Options or Implementation

Keywords

OGC, Open Geospatial Consortium, geographic information, geospatial, geospatial intelligence., observation, planning, sensor web enablement, sensors

Products Incorporating This

Standard

A list of registered implementations can be accessed at http/

/:www.opengeospatial.org.

Guidance for Using/

Implementing This Standard

Additional Comments

Citation authored by the GWG Information Transfer and Services Architec-

ture (ITSA) Focus Group.

Displaying item 2 of 7

DISR Number 8244 Org Number NGA00218

Standard Identifier STANAG 4559, EDITION 2

Standard Title NATO Standard ISR Library Interface (NSILI), Edition 2, dated 15 June 2007

CR Proposal Add New Mandated Standard

CR Rationale STANAG 4559 NSILI enables interoperable exchange of NATO Intelligence,

Surveillance and Reconnaissance (ISR) products among NATO accessible C4I Library Systems. The STANAG 4559 is the standard interface for querying and accessing heterogeneous product libraries maintained by various nations and revealed to partner nations. This standard specifies a common software interface to be implemented by the US for access to all NATO ISR inter-

operable library systems.

 Input Date
 2008-03-31

 Last Updated
 2008-04-07

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 Stephen Kerr

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ITSC Action Not Set

Reviewing TWG Geospatial Intelligence TWG (GWG)

TWG Action Not Set
Reviewer Action Send to TWG

Org Action Accept Author's Original Input

Reviewer Action: Send to TWG - 2008-04-07 2034 - Kenton Waddell

Org Member Action: Accept Author's Original Input - 2008-04-02 1213 - Cliff Daniels

DISR Number 8244 NGA00218 Org Number

CR Proposal Add New Mandated Standard Standard Identifier STANAG 4559, EDITION 2 Standard Title

NATO Standard ISR Library Interface (NSILI), Edition 2, dated 15 June 2007 STANAG 4559, the NATO Standard ISR (Intelligence, Surveillance and Reconnaissance) Library Interface (NSILI), specifies the network interface for accessing ISR product libraries when operating in the coalition environment. ISR product libraries supporting NATO operations have the capability to provide imagery, GEOINT, imagery products, metadata and other imagery-derived information in near real time. NSILI provides definition of this interface and describes product interchange on networked systems. NSILI is part of the NATO ISR Interoperability Architecture (NIIA) defined in NATO publication AEDP-2 and provides library access to data in the following formats: STANAG 4545 NSIF; STANAG 4607 GMTI; STANAG 4609 Motion Imagery; STANAG 7023 Primary Imagery; STANAG 4633 NATO Common ELINT Reporting Format; MIL-STD 2500; and ISO/IEC 12087-5 NSIF Profile of BIIF. Edition 2 is based upon CORBA, a future edition (2009) will address other

network ORB technologies (e.g. IIOP, SOAP, etc.).

STANAG 4559 is a NATO Standardization Agreement based on the US Im-**Technical Maturity**

agery and Geospatial System (USIGS) Geospatial and Imagery Access Services (GIAS) Specification. NSILI provides an application for international users with a connection to US DCGS service stations. The standard utilizes CORBA as a data controlling mechanism, considered reliable for closed networks. NATO is deploying the NSILI Coalition Shared Data Server (CSD) in the ISAF mission in 2008. Viability of the STANAG has been demonstrated in the Multi-Sensor Aerospace-Ground Joint Intelligence, Surveillance, Reconnaissance (ISR) Interoperability Coalition (MAJIIC) virtual environments and the Exercise Empire Challenge live fly environment. The STANAG has tested well in both environments, and has been improved in the testing process. NATO Nations systems include: Norwegian NORCCIS and MTOC; UK Watchkeeper, TREF, MEC and MIDAS; NC3A CSD; German SAR-Lupe, IIES

and Tornado; French SAIM; and the US DCGS-X.

Public Availability STANAG 4559 is available in the public domain from the NATO Standardization Agency at URL http://www.nato.int/docu/standard.htm. It is freely avail-

able along with supporting documents for implementation guidance.

Implementability Within the US DoD, STANAG 4559 has been implemented in DCGS during Exercise Empire Challenge 2007 and NATO Trial Quest 2007. It is a subset of the GIAS interface implemented in the US Imagery Product Library (IPL).

The Library Interface serves as a discovery and retrieval mechanisms for the NATO Nations and Australia. STANAG implementation in the US serves to support interoperability, especially with NATO ISAF forces, where the NC3A has deployed the Coalition Shared Dataserver (CSD) version of STANAG 4559 implementation. Implementations exist in the following nations and agencies: MAJIIC, NC3A, Germany, France, Great Britain, Italy, Norway, US test systems, and AGS3. Canada has NSILI clients or servers in development. Commercial interests in the UK, Italy, and Germany are the primary de-

velopers for the national defense structures. These include General Dynamics UK, QinetiQ, Thales, Datamat(Italy), Fraunhofer-IITB (Germany).

This standard was developed for the NATO Air Forces Armaments Group (NAFAG) within the Air Group 4 for Intelligence, Surveillance and Reconnaissance. The STANAG is currently maintained within the same ISR data management concern under the Joint Capability Group-ISR, one of several Capability Groups under NAFAG. The STANAG 4559 Custodial Support Team (CST) is the technical maintenance body and supports testing of the

STANAG through MAJIIC and other exercise venues. The CST also main-

Net-Centricity

Authority

Applicability

Abstract

URL to Access or Acquire Standard Organization

Sunset Event
Sunset Date
Supersedes
Standard Type
Classification
Profiling Question

tains a STANAG 4559 conformance test suite hosted by the NATO Command, Communications, and Consultation Agency (NC3A). Configuration management of the STANAG and supporting documents is governed by the Configuration Management Process defined in Volume 2 of the Allied Engineering Documentation Publication Number 2 (AEDP-2) for the NATO Intelligence, Surveillance and Reconnaissance Interoperability Architecture (NIIA) and in AEDP-5, the Implementation Guide for STANAG 4559.

STANAG 4559, the NATO Standard ISR Library Interface (NSILI), is used in Coalition and NATO Distributed Common Ground System structures as the discovery and retrieval (D&R) mechanism to query and provide ISR data including imagery, GMTI, Motion Imagery and general ISR data that can be discovered in a network (usually closed) of ISR product libraries. STANAG 4559 Clients, developed by participating nations utilizing common and standard data elements to query available IPLs, establish standing requests for new instances of data in an area of interest. Interfaces to the US DCGS Integrated Backbone (DIB) provide a link to accessing exposed data / data sources to coalition and friendly forces in closed networks. The NATO International Security Assistance Force (ISAF) commands have identified STANAG 4559 compliant capabilities for use in the battlefield.

STANAG 4559 NSILI is aimed at providing interoperable exchange of NATO Intelligence, Surveillance and Reconnaissance (ISR) products among NATO accessible C4I Library Systems. The STANAG 4559 is the standard interface for querying and accessing heterogeneous product libraries maintained by various nations and revealed to partner nations. This standard specifies a common software interface to be implemented and exist for all NATO ISR interoperable library systems. The interface provides electronic search and retrieval capabilities for distributed users to find products from distributed libraries in support of, but not limited to, rapid mission planning and operation, strategic analysis, and intelligent battlefield preparation. Product Libraries and the NSIL Interface are envisioned by NATO as a key technology utilized within existing Request for Information (RFI) procedures. The overall goal is for the users, who may be intelligence analysts, imagery analysts, cartographers, mission planners, simulations and operational users from NATO countries, to have timely access to distributed ISR information if Host Nation operational restrictions and security policies permit this access. Originally designed for discovery of still image files (STANAG 4545 NSIF), the 4559 STANAG is being expanded in capability to discover any type of ISR data revealed in an ISR Library. STANAG 4559 is part of the NATO ISR Interoperability Architecture (NIIA) defined in NATO publication AEDP-2 and provides access to data in the following formats: STANAG 4545 NSIF; STANAG 4607 GMTI; STANAG 4609 Motion Imagery; STANAG 7023 Primary Imagery; STANAG 4633 NATO Common ELINT Reporting Format; MIL-STD 2500; ISO/IEC 12087-5 NSIF Profile of BIIF.

http://www.nato.int/docu/standard.htm

Military Unclassified

C4ISR domain: Does your system discover ISR data from product libraries? C4ISR domain: Does your ISR library system support both client and server structures? C4ISR domain: Does your ISR library system support standing queries, such that new data is discovered at library ingest? C4ISR domain: Does your ISR library system protect release of information by application of CORBA technologies? C4ISR domain: Does your ISR library system support

web enabled discovery and retrieval? C4ISR domain: Does your ISR library system recognize data formatted in STANAG 4545, STANAG 4607, STANAG 4609, STANAG 4633, STANAG 7023; MIL-STD 2500; ISO/IEC 12087-5

NSIF Profile of BIIF; JPEG; TIF; GeoTIFF?

Service Area

Options or Implementation

GEOINT: Still Imagery

Constraints on implementing STANAG 4559 are outlined in AEDP-5 Implementation Guidance to support interoperability. STANAG 4559 implementation is also supported by validation test cases available through the STANAG Custodian and Support Team. Data management functions, derived from the USIGS GIAS, are applied to increase compatible data discovery from NSG

libraries specifically provided for information exchange.

Keywords

4545, 4607, 4609, 4633, AGI, CSD, Coalition Shared Data, D&R, DCGS, DIB, Discovery, ELINT, FMV, GMTI, ISR, MAJIIC, MI, Motion Imagery, NATO, NCERF, NIIA, NITF, NSIF, NSIL, NSILI, Retrieval, STANAG

Products Incorporating This Standard

Norwegian NORCCIS and MTOC, UK Watchkeeper, UK TREF, UK MEC, UK MIDAS; NC3A CSD, German SAR-Lupe, German IIES, German Tornado, French SAIM, US DCGS-X

Guidance for Using/ Implementing This Standard

A) The JCG-ISR recognizes the current limitations for a trusted technology that supports the management of release and handling instructions encoded on data. NSILI implementations therefore presume the limitation of a closed or controlled network to participating ISR libraries that contain fully releasable data, until such time as a solution technology can be applied. B) Discovery is dependent upon the robustness of metadata search engines and the existence of metadata encoded in data files; NSILI, for this reason, minimizes the discovery core data set. Profiles will be established for particular formats of data (4607: GMTI, 4609: Motion Imagery, 4633: ELINT Reports, 4676: ISR Tracks), but the baseline Core Data Model is based on STANAG 4545: NSIF and is mandated for compliance and backwards interoperability. C) Compatible exchange with the DCGS Integrated Backbone (DIB) has been developed and tested; however, there is no standard for the DIB. D) Alignment of STANAG 4559: NSILI with the USIGS Geospatial and Imagery Access Services Specification - Version 3.5.1, USIGS Common Object Specification-Version 1.5.1a, UIP Specification Change Summary, and Discovery & Retrieval Interface Data Model (Rev. M) - 30.09.2007, all NGA documents, are supported, but not controlled by, the STANAG 4559 Custodial Support Team and the US Interface Control Working Group (ICWG) and NSG Interface Control Working Group (NICWG).

Additional Comments

Allied Engineering Documentation Publication Number 5 (AEDP-5) and the STANAG 4559 NATO Standard ISR Library Interface (NSILI) Implementation Guide provide guidance for the implementation and testing of STANAG 4559. The STANAG, the AEDP-5 and other supporting documentation is provided at http://www.nato.int/docu/standard.htm This citation authored by the GWG NTB Focus Group.

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DISR Number 8247 Org Number NGA00219

Standard Identifier MIL-STD-188-199(1)

Standard Title Vector Quantization Decompression for the National Imagery Transmission

Format Standard, 27 June 1994 with Notice 1, 27 June 1996

CR Proposal Update Standard Details

CR Rationale Update citation for MIL-STD-188-199(1) in advance of the 3-year automatic

review cycle.

 Input Date
 2008-03-31

 Last Updated
 2008-04-08

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ITSC Action Not Set

Reviewing TWG Geospatial Intelligence TWG (GWG)

TWG Action Not Set
Reviewer Action Send to TWG

Org Action Accept Author's Original Input

Working Group Action: Not Set - 2008-04-08 1432 - Doris Bernardini

Working Group Rationale:

Working Group Action: Transfer - 2008-04-08 1432 - Doris Bernardini

To Working Group: Geospatial Intelligence TWG (GWG)

Working Group Rationale: Chairs of both the Radio Information Transfer TWG and the Geospatial Intelli-

gence TWG agree the subject matter expertise for this standard lies within the GWG.

Working Group Action: Not Set - 2008-04-08 1422 - Doris Bernardini

Working Group Rationale:

Working Group Action: Transfer - 2008-04-08 1422 - Doris Bernardini

To Working Group: Geospatial Intelligence TWG (GWG)

Working Group Rationale: Chairs of both the Radio Information Transfer TWG and the Geospatial Intelli-

gence TWG agree the subject matter expertise for this standard lies within the GWG.

Reviewer Action: Send to TWG - 2008-04-07 2105 - Kenton Waddell

Note: 2008-04-02 1256 - Cliff Daniels

The GWG requests transfer of ownership of this standard from the Radio Transfer Information TWG since this standard involves the National Imagery Transmission Format Standard (NITFS). The GWG has the appropriate SMEs to own this standards through the GWG the National Imagery Transmission Format Technical Board (NTB), which is a GWG Focus Group

Org Member Action: Accept Author's Original Input - 2008-04-02 1219 - Cliff Daniels

DISR Number 8247 Org Number NGA00219

CR Proposal Update Standard Details
Standard Identifier MIL-STD-188-199(1)

Standard Title Vector Quantization Decompression for the National Imagery Transmission

Format Standard, 27 June 1994 with Notice 1, 27 June 1996

Net-Centricity MIL-STD-188-199, Vector Quantization (VQ) Decompression is used to de-

compress all the Controlled Image Base (CIB) and Compressed ARC Digitized Raster Graphics (CADRG) digital raster map holdings provided by the NGA. The Digital Point Positioning Data Base (DPPDB) includes selected CADRG maps as map graphic indexes into the database. Data holdings that implement this standard are widely used through out the DOD/IC for mission planning, theater battle management, terrain analysis, digital moving maps,

precision targeting, and weapon engagement.

Technical Maturity The standard is technically mature and stable, to include established con-

formance test criteria, tools, services and technical consultation for the implementation profile used by the NITFS. This standard, based on ISO/IEC 12087-5, Basic Image Interchange Format (BIIF), has been part of the NITFS suite of standards since 1994 and part of STANAG 4545, NATO Secondary Imagery Format since 1998. A follow on standard under consideration is ISO/IEC 15444, JPEG 2000; investigations are only in the early stages. The sunset condition is the replacement or inactivation and removal of DPPDB, CIB and CADRG data holdings from NGA data distribution services and consequent use of these data holdings within the DOD/IC. Examples of commercial products conforming to the NITFS profile of this standard are listed in the

Products Incorporating this Standard section.

Public Availability MIL-STD-188-199(1), which profiles the implementation and use of ISO/IEC

12087-5 (BIIF) within the NITFS/NSIF, is available for download at no charge on the DOD's ASSIST database (http://assist.daps.dla.mil/online/start/). Both MIL-STD-188-199(1) and ISO/IEC 12087-5 (ISO/IEC authorized NTB version) are available for download at no charge on the NITFS Technical Board

(NTB) Public Document Area (http://www.gwg.nga.mil/ntb/).

Implementability Used in Digital Point Positioning Data Base (DPPDB), Controlled Image Base

(CIB) and Compressed ARC Digitized Raster Graphic(CADRG) provided by NGA and is widely implemented by a variety of systems (data production, dissemination, library/archive, exploitation work stations,) supporting the NITFS suite of standards. It is also used by non- NITF capable Raster Product Format (RPF) implementations such as Falcon View. Sample data, sample software, technical consultation, and conformance testing services are available to government and commercial implementers of the standard by contacting the NITFS Test Facility operated by the (JITC) on behalf of NGA. Contact information available at http://jitc.fhu.disa.mil/nitf/nitf.html, 1-800-538-5482, x8-5458, and jitcn@disa.mil. A list of government and commercially developed conforming implementations of the NITFS can be found at ht-

tp://jitc.fhu.disa.mil/nitf/off_reg.html"

Authority The ISO/IEC 12087-5 standard, which MIL-STD-188-199(1) profiles, was de-

veloped by ISO/IEC Joint Technical Committee 1/SubCommittee 24, Computer Graphics and Image Processing. The process for maintaining and developing the standard is an internationally open process by members of national bodies and liaison organizations participating with ISO/IEC. The US implementation profile of the international standard, MIL-STD-188-199(1), was developed, and is maintained, by the NITFS Technical Board (NTB). The NTB has broad participation across the DOD/IC with open participation by commercial industry. The VQ standard is also called out for use within

STANAG 4545, NATO Secondary Imagery Format (NSIF).

Applicability The National Imagery Transmission Format Standard (NITFS) is a DoD and

Federal Intelligence Community suite of standards for the exchange, storage, and transmission of digital-imagery products and image-related products. Other image formats can be used internally within a single system; however, NITFS is the default format for interchange between systems. NITFS provides a package containing information about the image, the image itself, and optional overlay graphics. The standard provides a ?package? containing an image(s), subimages, symbols, labels, and text as well as other information related to the image(s). NITFS supports the dissemination of secondary digital imagery from overhead collection platforms. Guidance on applying the suite of standards composing NITFS can be found in MIL-HDBK-1300A, National Imagery Transmission Format Standard (NITFS), 12 October 1994. The NITFS allows for Support Data Extensions (SDEs), which are a collection of data fields that provide space within the NITFS file structure for adding functionality. Documented and controlled separately from the NITFS suite of standards, SDEs extend NITF functionality with minimal impact on the underlying standard document. SDEs may be incorporated into an NITF file while maintaining backward compatibility because the identifier and byte count mechanisms allow applications developed prior to the addition of newly defined data to skip over extension fields they are not designed to interpret. These SDEs are described in the Compendium of Controlled Extensions (CE). This standard is mandated for imagery product dissemination. This standard establishes the requirements to be met by NITFS compliant systems when image data are decompressed using the VQ compression algorithm. This allows NITFS-compliant systems to accept and decompress data that are compressed using a VQ compression scheme. This standard describes the VQ compression in the general requirements section, but does not fully describe the steps for compression. The steps involved in decompressing images compressed with VQ are fully described by this standard. This standard provides technical detail of the NITFS VQ decompression algorithm, designated by the code C4 or M4 in the image compression field of the image subheader in a NITF file. This standard is applicable to the IC and the DOD. It is mandatory for all Secondary Imagery Dissemination Systems (SIDS) in accordance with the memorandum by the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence ASD(C3I) Subject: National Imagery Transmission Format Standard (NITFS), 12 August 1991. This directive shall be implemented in accordance with the MIL-STD-2500, JIEO Circular 9008 and MIL-HDBK-1300. New digital imagery equipment and systems, those undergoing major modification, or those capable of rehabilitation shall conform to this standard.

Abstract

URL to Access or Acquire

Standard Organization
Sunset Event

Sunset Date

Supersedes MIL-STD-188-199(1)

DoD

None

Standard Type Military
Classification Unclassified

Classification Unclassified Profiling Question Does your sy

Does your system exchange Still Imagery data with external systems? Does your system need to use NGA's Controlled Image Base (CIB), Compressed Arc Digitized Raster Graphic (CADRG) or Digital Point Positioning Data Base

(DPPDB) products? GEOINT: Still Imagery

http://assist.daps.dla.mil/quicksearch

Service Area
Options or Implementation

Keywords

Products Incorporating This Standard

NITF, RPF, VQ, compression, format, imagery, transmission

Controlled Image Base (CIB), Compressed Arc Digitized Raster Graphic

(CADRG), Digital Point Positioning Data Base (DPPDB)

Guidance for Using/

Implementing This Standard There are a number of imagery compression standards used in conjunction

with the National Imagery Transmission Format Standard (NITFS). Vector Quantization (VQ) imagery compression is only used by NGA in the production of CIB, CADRG and DPPDB product lines. MIL-STD-188-199(1) only addresses the decompression aspect of VQ-compressed imagery. The standard is only applicable to systems with the need to read and use CIB, CADRG,

and DPPDB products.

Additional Comments This citation authored by the GWG NTB Focus Group.

Displaying item 4 of 7

DISR Number 8245 Org Number NGA00220

Standard Identifier OpenGIS GeoXACML 1.0

Standard Title OpenGIS Geospatial eXtensible Access Control Markup Language

(GeoXACML), Version 1.0, February 2008

CR Proposal Add New Emerging Standard

CR Rationale GeoXACML is an extension to the XACML Policy Language that supports the

declaration and enforcement of access restrictions on geographic information

over the world wide web.

 Input Date
 2008-04-01

 Last Updated
 2008-04-07

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ITSC Action Not Set

Reviewing TWG Geospatial Intelligence TWG (GWG)

TWG Action Not Set Reviewer Action Send to TWG

Org Action Accept Author's Original Input

Reviewer Action: Send to TWG - 2008-04-07 2039 - Kenton Waddell

Org Member Action: Accept Author's Original Input - 2008-04-02 1226 - Cliff Daniels

DISR Number 8245 Org Number NGA00220

CR Proposal Add New Emerging Standard Standard Identifier OpenGIS GeoXACML 1.0

OpenGIS Geospatial eXtensible Access Control Markup Language Standard Title

(GeoXACML), Version 1.0, February 2008

Net-Centricity GeoXACML provides an extension to the XACML Policy Language that sup-

ports the declaration and enforcement of access restrictions on geographic

information over the world wide web.

Technical Maturity The OpenGeospatial Consortium began development of the Geospatial eX-

tensible Access Control Markup Language Implementation Specification in

January 2007. GeoXACML Version 1.0 was published in 2008.

Public Availability The specification is freely available from the Open Geospatial Consortium at

http://www.opengeospatial.org/standards/geoxacml.

A list of registered implementations can be accessed at ht-Implementability

tp://www.opengeospatial.org.

Authority The OpenGeospatial Consortium is an international organization with mem-

bers from industry, government and academia which uses an open process for developing an maintaining standards for geospatial information and ser-

vices.

Applicability This standard is applicable to the development of systems that require ac-

cess control to geospatial information over the world wide web. GeoXACML can be used to establish an Access Control Mechanism to protect the access

to OpenGIS Web Services (OWS).

Abstract The Geospatial eXtensible Access Control Markup Language (GeoXACML)

defines an extension to the XACML Policy Language that supports the declaration and enforcement of access restrictions on geographic information. GeoXACML is a geospatial extension to the OASIS standard eXtensible Access Control Markup Language (XACML) Version 2.0 . As an extension to OASIS eXtensible Access Control Markup Language (XACML), GeoXACML provides support for spatial data types and spatial authorization decision functions. Those data types and functions can be used to define additional spatial constraints for XACML based policies. GeoXACML includes a model for a rule based access control system that incorporates stereotype definitions of a Policy Enforcement Point (PEP), Policy Decision Point (PDP), Policy Administration Point (PAP) and Policy Information Point (PIP) as well as their relations to each other in the context of an access control system.

URL to Access or Acquire

http://www.opengeospatial.org/

Standard Organization

OpenGIS

Secondary Interest

Sunset Event Sunset Date Supersedes Standard Type DoD Intelligence TWG

Non-Military Classification Unclassified

Profiling Question Does your system require managed rule-based, policy language, access con-

trol to geospatial information and services within your service oriented archi-

tecture in an interoperable way across jurisdictions?

Service Area

Options or Implementation

Keywords

GEOINT: Geospatial

OGC, Open Geospatial Consortium, access control, geographic, geographic information, geospatial, geospatial intelligence, policy language, rule based

Products Incorporating This

Standard

A list of registered implementations can be accessed at http/

/:www.opengeospatial.org.

Guidance for Using/

Implementing This Standard Additional CommentsThere are no known competing standards.
This citation authored by the GWG Informa This citation authored by the GWG Information Transfer & Services Architec-

ture (ITSA) Focus Group.

Displaying item 5 of 7

DISR Number 8246
Org Number NGA00221
Standard Identifier MIL-STD-2411(2)

Standard Title Raster Product Format, 6 October 1994; with Notice of Change, Notice 1, 17

January 1995, and Notice of Change, Notice 2, 16 August 2001

CR Proposal Update Standard Details

CR Rationale Mil-Std-2411(2), Raster Product Format, came up for 3-year automatic review

with default recommendation to retire the standard. The standard is still in operational use and should not be retired. This adminstrative change request

provides update information for the standard's DISR citation.

 Input Date
 2008-04-01

 Last Updated
 2008-04-07

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ITSC Action Not Set

Reviewing TWG Geospatial Intelligence TWG (GWG)

TWG Action Not Set
Reviewer Action Send to TWG

Org Action Accept Author's Original Input

KIP Family: TRANSPORT - KIP: IBS

KIP Family: TRANSPORT - KIP: Integrated Broadcast System

Reviewer Action: Send to TWG - 2008-04-07 2050 - Kenton Waddell

Org Member Action: Accept Author's Original Input - 2008-04-02 1223 - Cliff Daniels

DISR Number 8246 Org Number NGA00221

CR Proposal Update Standard Details Standard Identifier MIL-STD-2411(2)

Standard Title Raster Product Format, 6 October 1994; with Notice of Change, Notice 1, 17

January 1995, and Notice of Change, Notice 2, 16 August 2001

Net-Centricity

MIL-STD-2411(2) Raster Product Format specifies a format and metadata re

MIL-STD-2411(2) Raster Product Format specifies a format and metadata requirements for all the Controlled Image Base (CIB) and Compressed ARC Digitized Raster Graphics (CADRG) digital raster map holdings provided by the NGA. The Digital Point Positioning Data Base (DPPDB) includes selected CADRG maps as map graphic indexes into the database. Data holdings that implement this standard are widely used throughout the DoD/IC for mission planning, theater battle management, terrain analysis, ditital moving maps, precision targeting, and weapon engagement.

Technical Maturity MIL-STD-2411(2) has been in use since 1994. The standard is technically

mature and stable, to include established conformance test criteria, test tools, test services and technical consultation for the implementation. The sunset condition for this standard is the replacement or inactivation and removal of DPPDB, CIB and CADRG data holdings for NGA data distribution services

and consequent use of these data holdings within the DoD/IC.

Public Availability MIL-STD-2411(2) is available for download at no charge on the DoDs AS-

SIST database http://assist.daps.dla.mil/quicksearch.

Implementability The standard has been implemented in the Commercial Joint Mapping

Toolkit and by several vendors of commercial-off-the-shelf software.

Authority MIL-STD-2411(2) is an approved military standard.

Applicability Geospatial services are also referred to as mapping, charting, and geodesy

(MC&G) services. Raster Product Format (RPF) defines a common format for the interchange of raster-formatted digital geospatial data among DoD components. Existing geospatial products that implement RPF include Compressed ARC Digitized Raster Graphics (CADRG), Controlled Image Base (CIB), and Digital Point Positioning Data Base (DPPDB). For raster-based

products, this standard is mandated.

Abstract The Raster Product Format (RPF) is a standard data structure for geospatial

databases composed of rectangular arrays of pixel values (e.g. in digitized maps or images) in compressed or uncompressed form. RPF is intended to enable application software to use the data in RPF format on computer-readable interchange media directly without further manipulations or transformation. Each product category that represents a single instantiation of RPF, or a family of instantiations of RPF, shall be described in a separate product specification that makes appropriate reference to this RPF standard and its companion standard, MIL-STD-2411-1, which defines registered data values to be used with RPF files. MIL-STD-2411-2 (NOTE 1), Integration Of Raster Product Format Files Into The National Imagery Transmission Format, describes how RPF data (e.g. for CIB and CADRG) are formatted using Mil-Std-2500, The National ImageryTransmission Format Standard (NITF).

URL to Access or Acquire http://assist.daps.dla.mil/quicksearch

Standard Organization DoD

Secondary Interest Application / Messaging TWG
Secondary Interest Information Transfer TWG

Sunset Event None

Sunset Date

Supersedes MIL-STD-2411(2)

Standard Type Military
Classification Unclassified

Profiling Question Is any of your geospatial data raster-formatted? Does your system need to

read/use Controlled Image Base (CIB), Compressed ARC Digitized Raster

Service Area

Options or Implementation

Keywords

Graphic (CADRG) or Digital Point Positioning Data Base (DPPDB)?

GEOINT: Still Imagery

CADRG, CIB, DPPDB, Graphics, MIL-STD-2411(1), NITF, NITFS, RPF

maps, Raster Product, data, image

Products Incorporating This

Standard

Controlled Image Base (CIB), Compressed ARC Digitized Raster Graphic

(CADRG), Digital Point Positioning Data Base (DPPDB)

Guidance for Using/ Implementing This Standard Additional Comments

This DoD Military Standard is used by the National Geospatial-Intelligence Agency (NGA) to produce, and outsource production of CIB, CADRG, and DPPDB data. Administrative Notice 3, 31 March 2004, has been added to the DoD's ASSIST database. It informs users of the change in name of the preparing activity from the Defense and Mapping Agency (DMA) to the National Geospatial-Intelligence Agency (NGA). This citation authored by the GWG NTB Focus Group.

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DISR Number 8263

Org Number Other Govt00919
Standard Identifier ISO/IEC 15444-2:2004

Standard Title Information technology -- JPEG 2000 image coding system: Extensions

CR Proposal Move Emerging Standard to Mandated

CR Rationale All standards must be reviewed periodically to determine if they are still ap-

plicable to the acquisition community.

Input Date2008-04-10Last Updated2008-04-10AuthorScheduled Review

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ITSC Action Not Set

Reviewing TWG Geospatial Intelligence TWG (GWG)

TWG Action Not Set

Reviewer Action Accept Org Member's Recommendation

Org Action Accept Author's Original Input

Reviewer Action: Accept Org Member's Recommendation - 2008-04-10 1117 - Scheduled Review

To Working Group: Geospatial Intelligence TWG (GWG)

Reviewer Rationale: All standards must be reviewed periodically to determine if they are still applicable to the acquisition community.

Org Member Action: Accept Author's Original Input - 2008-04-10 1117 - Scheduled Review

To Working Group: Geospatial Intelligence TWG (GWG)

Org Member Rationale: All standards must be reviewed periodically to determine if they are still applicable to the acquisition community.

DISR Number 8263

Org Number Other Govt00919

CR Proposal Move Emerging Standard to Mandated

Standard Identifier ISO/IEC 15444-2:2004

Standard Title
Net-Centricity

Information technology -- JPEG 2000 image coding system: Extensions
JPEG 2000 is designed to promote ease of access to imagery, to include extremely large imagery data sets, in a manner that promotes scalability and interactive image viewing and exploitation within a net-centric environment.
ISO/IEC 15444, Part 2 provides extensions to ISO/IEC 15444, Part 1, JPEG 2000, which is the preferred imagery compression standard for use with the National Imagery Transmission Format Standard (NITFS). The NITFS is the common thread of interoperability for the formatting, imagery library storage and cataloging, dissemination, and exploitation of National Technical Means (NTM), Tactical Airborne, and Commercial imaging sources. At this time (Jun2005), JPEG 2000 Part 2 is considered an emerging standard designed to meet special needs not supported in Part 1; however, specific application

not yet been identified.

Technical Maturity Public Availability

Public AvailabilityAvailable for purchase from the ISO Store (online): http://www.iso.org/iso/en/prods-services/ISOstore/store.html

Implementability

As of June 2005, there is no known use of this standard within the Intelligence Community (IC); however, representatives from the IC provided capability needs and solutions during the development of this international standard in anticipation of using the standard to meet future operational requirements. Application of this standard is emerging in anticipation of future opera-

tional requirements that cannot be met with Part 1 of the standard.

ISO/IEC JTC 1/SC 29, Coding of audio, picture, multimedia and hypermedia information, developed and maintains this standard. The NITFS Technical Board (NTB) [http://www.ismc.nga.mil/ntb/] is the DOD/IC focal point for the open process of maintaining and future development for this standard at ISO/

of Part 2 within the National System for Geospatial Intelligence (NSG) has

IEC.

Applicability

Authority

JPEG 2000 provides a new means of image representation containing a rich set of features, all supported within the same compressed bit stream. Part I of JPEG 2000 contains mandatory features. Part II of JPEG 2000 is a published International Standard (IS) that contains optional features beyond those in Part I including:- More flexible forms of wavelet decomposition and coefficient quantization,- Advanced region-of-interest capability,- Expanded file format (.jpx) based on .jp2 but supporting multiple compositing layers, animation, extended color spaces, - Increased capability for multi-spectral/hyper-spectral compression, - A rich metadata set for photographic imagery (based on the DIG25 specification),- Low complexity implementation, and - Trellis quantized compression. Only those features that are needed for specific applications need be implemented. To assist interoperability, mechanisms are provided at both the code stream and the JPX file format level for signaling the use of extensions. Since use/application of this standard is emerging, those considering use/application of this standard should make contact with the NITFS

Technical Board (NTB) [http://www.ismc.nga.mil/ntb/].

ISO/IEC 15444-2:2004 defines a set of lossless (bit-preserving) and lossy compression methods for coding continuous-tone, bi-level, gray-scale, color digital still images, or multi-component images. ISO/IEC 15444-2:2004: - Specifies extended decoding processes for converting compressed image data to reconstructed image data; - Specifies an extended code stream syntax containing information for interpreting the compressed image data; - Specifies an extended file format; - Specifies a container to store image metadata; - Defines a standard set of image metadata; - Provides guidance

Abstract

on extended encoding processes for converting source image data to com-

pressed image data; - Provides guidance on how to implement these pro-

cesses in practice http://www.ansi.org

GEOINT: Still Imagery

URL to Access or Acquire

Standard Organization

Sunset Event **Sunset Date**

Supersedes ISO/IEC 15444-2:2004

ISO

Standard Type Non-Military Classification Unclassified

Profiling Question Does your system have specialty image compression requirements not ad-

dressed by the JPEG 2000 Part 1 standard?

Service Area

Options or Implementation

Keywords

Products Incorporating This

Standard The known implementers of selected features from Part 2 include the Kakadu

product and software from Aware and Liratech.

Guidance for Using/

Implementing This Standard

Additional Comments

Displaying item 7 of 7

DISR Number 8318

Org Number Other Govt00974
Standard Identifier ISO 19107:2003

Standard Title Geographic information - Spatial schema, 08 May 2003

CR Proposal Retire Standard

CR Rationale All standards must be reviewed periodically to determine if they are still ap-

plicable to the acquisition community.

Input Date2008-04-10Last Updated2008-04-10AuthorScheduled Review

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ITSC Action Not Set

Reviewing TWG Geospatial Intelligence TWG (GWG)

TWG Action Not Set

Reviewer Action Accept Org Member's Recommendation

Org Action Accept Author's Original Input

Reviewer Action: Accept Org Member's Recommendation - 2008-04-10 1119 - Scheduled Review

To Working Group: Geospatial Intelligence TWG (GWG)

Reviewer Rationale: All standards must be reviewed periodically to determine if they are still applicable to the acquisition community.

Org Member Action: Accept Author's Original Input - 2008-04-10 1119 - Scheduled Review

To Working Group: Geospatial Intelligence TWG (GWG)

Org Member Rationale: All standards must be reviewed periodically to determine if they are still applicable to the acquisition community.

DISR Number 8318

Org Number Other Govt00974 CR Proposal Retire Standard Standard Identifier ISO 19107:2003

Geographic information - Spatial schema, 08 May 2003 Standard Title

This standard (in conjunction with other ISO TC211 standards) will form the **Net-Centricity**

basis for the interchange and distribution of future geospatial intelligence data

in vector form.

Technical Maturity

Copies of this standard are publically available, in either hardcopy (paper) or **Public Availability**

softcopy (PDF) form, from the International Standards Organization at a charge of 220 CHF (Swiss francs). Copies of this standard are also publicly available from ANSI (www.ansi.org) in PDF format. It is listed as ISO 19107:2003 for \$175, and as INCITS/ISO 19107 - 2003 for \$18.

This standard defines a conceptual model. It is not necessarily directly imple-Implementability

> mentable, but rather defines a basis from which profiles and application schemas can be derived to meet the requirements of specific application do-

mains.

Authority This is an International Standard, published by the International Standards

Organization (ISO).

Applicability This standard is applicable to the storage, manipulation, interchange, and ex-

ploitation of geospatial intelligence data in vector form. It forms part of an overall conceptual model for geospatial data in vector form that will eventually

replace MIL-STF-2407.

Abstract This International Standard (ISO 19107:2003, Geographic information - Spa-

tial schema) specifies conceptual schemas for describing the spatial characteristics of geographic features, and a set of spatial operations consistent with these schemas. It treats vector geometry and topology up to 3 dimensions. It defines standard spatial operations for use in access, query, management, processing, and data exchange of geographic information for spatial (geometric and topological) objects of up to 3 topological dimensions em-

bedded in coordinate spaces of up to 3 axes. http://www.ansi.org

URL to Access or Acquire

Standard Organization

Sunset Event Sunset Date

ISO 19107:2003 Supersedes Standard Type Non-Military Classification Unclassified

ISO

Profiling Question Does this application require the interchange, distribution, manipulation, or

exploitation of geospatial intelligence data in vector form?

GEOINT: Geospatial Service Area

Options or Implementation

Keywords

Products Incorporating This

Standard

Guidance for Using/

Implementing This Standard

Additional Comments